EPA REGION 6 CONGRESSIONAL DISTRICT 01

Bowie County Texarkana

Updated: August 25, 2004

TEXARKANA WOOD PRESERVING CO.

EPA ID# TXD008056152

Site ID: 0601695

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Site Description

Lubbock Street, Texarkana, Texas near the Texas - Arkansas border

Population: • Approximately 200 people live within one-third of a mile of the site.

Setting: • Nearest residence is 500 feet west of the site.

• Most area drinking water comes from Wright Patman Lake (formerly Lake Texarkana), which is not impacted by the site.

• Former wood preserving operations

• Abandoned equipment, tanks, and buildings

• On-site retention ponds and evaporation ponds

Hydrology: • Depth to first water zone - 12 feet.

• Sandy soils in the area.

• Ground water is not used in vicinity of sites.

• Confining zone at 110 feet.

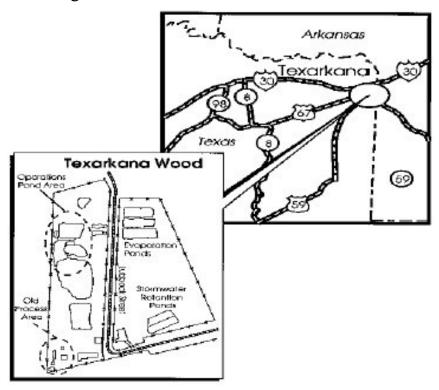
Wastes and Volumes -

- The principal pollutants at the site include polynuclear aromatic hydrocarbons (PAHs), pentachlorophenol (PCP) and dioxins.
- Waste volumes at the site are estimated to be 88,920 cubic yards of soil and sludge contaminated with PAHs, PCP, and dioxin, 460,000 gallons of dense non-aqueous phase liquid (DNAPL), and 49,000,000 gallons of contaminated ground water.

Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 40.19 Proposed Date: 3/29/85 Final Date: 6/10/86 NPL Update: No. 4



The Remediation Process

Site History:

- Abandoned wood treating facility operated from 1909 to 1984 under various owners.
- Prior removal actions have controlled site runoff and restricted public access
- During the period from December 1986 to October 1990, the EPA conducted five (5) removal actions to address contamination and potential off-site releases from site.
- On July 8, 1994, the Regional Administrator asked the State environmental agency to let bids received from incineration contractors to expire without an award to allow the Congressional Office of Technology Assessment (OTA) and General Accounting Office (GAO) to complete a study of incineration and alternatives for the site. Incineration of contaminated soils at this abandoned creosote site had been selected by the EPA under the Superfund law in 1990. Community outreach efforts and unusually strict operating requirements did not quell objections by some local residents prompting requests from Congress for OTA and GAO studies. As a result, the EPA withdrew the selected remedy.
- During October 1996, the EPA collected contaminated soil samples from the site for soil stabilization and bioremediation bench scale laboratory testing. The EPA used the results of these tests to determine the suitability of several alternative remedies.
- The Texas Natural Resource Conservation Commission (TNRCC)(presently the Texas Commission on Environmental Quality (TCEQ)) awarded a contract in 1997 to improve fencing around the site and to decontaminate and remove existing process equipment and structures. This work was completed in 1997.
- On November 13, 1997, the EPA presented to the community the draft of an Amendment to the Record of Decision proposing that the site be capped and that the ground water remedy be studied further. The 30-day comment period of this Record of Decision closed December 5, 1997. This ROD Amendment was signed on March 13, 1998.
- The State collected additional data on the extent of soil and water contamination and issued a detailed report in March 1999.

- A field pilot study to evaluate the effectiveness of trenches in the collection and removal of Non-Aqueous Phased Liquid (NAPL) was completed in November of 2000. The test indicated that trenches were not the most effective method in collection of NAPLs.
- Eight additional wells were installed in August of 2002 to confirm hydraulic conductivity through pump tests, and to investigate the lateral extent of free product (NAPL) and ground water contamination. The wells found additional NAPL in areas considered NAPL free.
- In August 2003, geoprobe rigs were used to take subsurface cores and install temporary wells to characterize the NAPL free product mass, NAPL residual and dissolved concentrations. In October 2003, ground water sampling was conducted to delineate the lateral extent of dissolved contaminants. This information will be used to tailor a cost effective remedy for this Site.
- The subsurface soils and ground water analytical data acquired from the August, October and November 2003 field work is being used in numerical models to develop an understanding of the attenuative properties of the contaminated aquifer and to select the most effectiveness remedy.
- EPA has completed bench-scale solidification and chemical oxidation treatability tests on soils and ground water collected during the 2003 geoprobe investigation. A Chemical Oxidation injectivity pilot test will be conducted in the future to determine the applicability of Chemical Oxidation in the source and dissolved plume areas. These treatability values are being used in a ground water model simulation to determine if solidification and/or chemical oxidation and Monitored Natural Attenuation will be cost effective remedies.

Health Considerations:

- Nearest drinking water well is 2,400 feet east of the site.
- Creosote contaminated soils, sludge, present a human health hazard

Other Environmental Risks:

• Contamination of ground and surface water; drainage is to the southeast to Day's Creek

Record of Decision ——

Signed: September 25, 1990 (Source and Shallow Ground Water) Signed: September 30, 1993 (Deeper Ground Water) Record of Decision Amendment Signed: March 13, 1998 (Revised Source/Soils Remedy)

The 1990 ROD was to remediate contaminated Ground Water by:

• Extracting, treating, and injecting the ground water into the shallow aquifer.

The 1990 ROD was to remediate contaminated Soils by:

• Excavation of contaminated soils, on-site thermal destruction, and burial on site (Soil remedy amended in February 1998)

Other Remedies Considered Reason Not Chosen

1. Capping No reduction in volume or toxicity of contaminants.

2. Chemical Treating Only partially effective

3. Solidification Not permanent.

4. Biological Treatment Only partially effective.

5. Offsite Thermal Destruction Too costly; transportation risks.

6. "No Action"

Not protective of human health and the environment.

Record of Decision Amendment

The soil remedy was amended to replace excavation of contaminated soils and on-site thermal destruction of contaminated soils with containing contaminated soils beneath a soil cap on-site.

Community Involvement —

- Community Involvement Plan: Developed 12/87, revised 5/91
- Open houses and workshops: 1/88, 6/89, 6/92, 9/92, 1/93, 5/96
- Proposed Plan Fact Sheet and Public Meeting: 7/14/90 (Source), 1/93 (Ground Water)
- ROD Fact Sheet: 10/90 (Source); 2/93 (Ground water)
- Milestone Fact Sheets: 5/88, 11/90, 2/91, 2/93, 6/99 (TNRCC Site Update Newsletter)
- Citizens on site mailing list: 1400+ includes Texas and Arkansas residents.
- Constituency Interest:
 - Site cleared of vegetation in February 1991 in response to local fire officials concerned about potential air releases from grass fires on the site.
 - Opposition to incineration remedy by community became very vocal in 1992.
 - Arkansas Attorney General filed suit in December 1992 opposing remedy implementation; the suit was dismissed.
 - Congressman Chapman requested that incineration not be implemented until after the OTA and GAO complete their study of incineration safety and the alternatives available for remediating the Site.
 - Incineration placed on hold pending review by Office of Technology Assessment.
 - Incineration replaced with on-site capping remedy in Amended ROD on March 13,1998.
 - General Accounting Office visited the community twice to interview citizens and assess impact of site issues. The EPA studied alternative remedies for suitability.
 - Community formed a Community Advisory Group (CAG)
- Site Repository: Texarkana Public Library, Texarkana, TX

Technical Assistance Grant —

- Availability Notice: 1/11/89
- Letters of Intent Received:
 - 1. Citizens Against Pollution (CAP) 10/19/92
- Final Application Received: None
- Grant Award: N/A
- Current Status: Working with citizen groups to develop interest in an application.

Contacts -

- Remedial Project Manager (EPA): Charles David Abshire, 214-665-7188, Mail Code: 6SF-AP
- State Contact: (TCEQ) Fay Duke, 512/239-2443, Mail Code 144
- Community Involvement Coordinator (EPA): Donn Walters, 214-665-6483, Mail Code: 6SF-PO
- Attorneys (EPA): Joseph Compton III, 214-665-8506, Mail Code: 6SF-DL
- State Coordinator (EPA): Karen Bond, 214-665-6682, Mail Code: 6SF-AP
- R6 Public Liaison (EPA): Arnold Ondarza, 1-800-533-3508 or 303-312-6777; Mail Code: 6SF
- Prime Contractor: Shaw Environmental & Infrastructure, Inc.

Enforcement———

- PRPs Identified: 14Viable PRPs: None
- Cost recovery to occur, if feasible

Present Status and Issues —

- The EPA/TCEQ are presently working on a remedy which will address both soils and contaminated ground water. The 1999 field sampling data on soils and groundwater, additional monitoring wells, recent (2003) geoprobe investigations, ground water sampling and treatability tests are being used in numerical modeling simulations to define the most appropriate remedy and bring this site to closure. Following selection of a remedy, the existing ROD will be amended.
- a perimeter fence prevents trespassing; vegetation is cleared on a regular basis.

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• Reduce the mobility of contaminants in soils and ground water. Prevent the public's exposure to contaminants.